

Cuphea platycentra (Cigar or Match Plant) shows splendid glandular trichomes.

Coleus harlequin shows collenchyma nicely.

Tradescantia, sp? (Wandering Jew) has remarkably regular epidermis on the upper surface of the leaves. In horizontal section it appears made up of almost exactly hexagonal cells. Very long slender trichomes at the nodes.

Pilea pilosa (Artillery plant) was one of the most interesting plants examined. The motion of the protoplasm carrying chlorophyll grains can be easily seen in the parenchyma of the primary cortex. Cystoliths, as in its wild congener, *P. pumila* are of extraordinary size and number, thirteen being counted in a cross-section of a small branch. They are everywhere, leaves and stems being full of them! The epidermal cells of the leaves are also extremely large.

Begonia semperflorens will compare favorably with the pumpkin for a "general purpose" plant. The epidermis is composed of large cells; the collenchyma is beautifully regular; the tracheary tissue is represented by spiral, angular, annular, scalariform and pitted vessels, many of the latter exhibiting the "crossed" pits; the lenticils show a peculiar development of cork; the starch grains are large and both simple and compound crystals are present (Vide Bot. Gaz. VII, 12). Finally the stomata occur in groups of 6-14 and show plainly the successive segmentation of the original epidermal cells to form the mother-cell of the stoma.

There is but one objection to the *Begonia* for general laboratory use and that can be easily overcome. It must be grown especially for the purpose, while any corn-field almost will furnish the standard pumpkin. The ease and rapidity with which it can be grown from cuttings will almost invalidate this objection, and this species seems to be more compact and easily handled than any other. The *Begonia* has several points of superiority over the *Cucurbitaceae*, chiefly in the structure of the fibro-vascular bundle, which is much simpler and easier of comprehension by the average student. Trichomes (except on the root) are absent from this species. This plant in connection with those already in wide use, will be found of very considerable value in laboratory work.—CHAS. R. BARNES, *LaFayette, Ind.*

A Large Red-bud.—I found growing on the hill-side near my house a specimen of the Red-bud, *Cercis Canadensis*, which was about 14 inches in diameter at a point 10 inches above the ground. The trunk was well-formed throughout and free from swellings or knots.—O. M. MEYNCKE, *Brookville, Ind.*